

MAR 20 1970

U.S.A.

ANNUAL CATALOGUE OF

AR IN presenting to you our annual Catalogue, the years of experience which we

IN presenting to you our annual Catalogue, the years of experience which we have had as manufacturers of Harvesting Machinery are placed unreservedly at your command. We hope that you will have both the opportunity and the will to avail yourselves of our services.

We have the honor to be,

Your very obedient servants.

J. F. SEIBERLING & CO.

MOWERS, BEAPERS, WHINDER

THE J.F. SEIBERLINGS

CABLE ADDRESS.

BRANCH OFFICES FOR DISTRIBUTING MACHINES AND REPAIRS:

1	San Francisco Ca Denver Co Omaha Net Des Moines fow Dubuque low Sloux City low	St. Louis Mo. Parker So. Dak. Chicago III. Peoria III. Centralia III.	Jackson Microscope Columbus Ohio Harrisonburg V Dallas Te Nashville Harrishurg P	o. o. a. x. n. a.
	Minneapolis Mini	Louisville. Ind.	Harrisburg (research	



SIMPLEST IN CONSTRUCTION.

PERFECT IN ITS WORK.

THE NEW EMPIRE STEEL BINDER.

THE EASIEST HANDLED.

STRONG! DURABLE! PRACTICALLY ALL STEEL AND MALLEABLE IRON.

LIGHTEST IN WEIGHT AND DRAFT.

1893 · SEASON · 1893

THE NEW EMPIRE STEEL BINDER.



The Most Economical Machine in the Use of Twine Ever Manufactured.

Every farmer who contemplates the purchase of a harvester and binder is desirous of securing the best. To determine which is the best, he must decide which has the following prime essentials best combined: Strength, durability, lightness of draft, ease of management, perfection of its work. Through all the years of our experience in manufacturing Harvesting Machinery, our aim has been to so construct our machines that these cardinal points would be seen stamped in every joint, bearing and part that enters into their construction.

In the face of universal endeavor to cheapen construction, we have endeavored to make the very best machines that could be turned out, regardless of cost, and are to-day making not only the most costly harvester and binder that we have ever produced, but by far the most costly that has ever been offered to the farming public by anyone.

The best is the cheapest; and believing that this truism will be accepted by the farming community in general, we have spared neither expense nor pains in the production of our machines, which are built for hard, honest work, perfect in detail, and we feel warranted in claiming that they have more superior points than any machines of their class in existence.

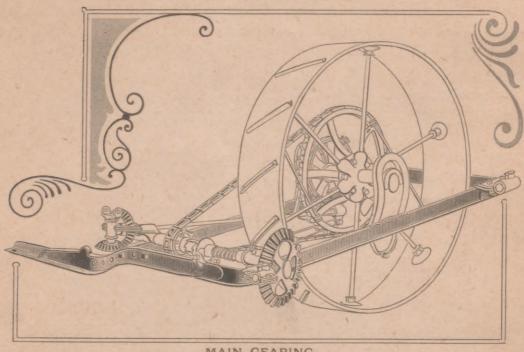
Our binder has many superior features in its make-up over all competitors, but it has two advantages of vital importance to every farmer who desires to harvest his crop at the least cost and with the greatest comfort to himself and team.

It will harvest your crop, using less twine than any machine in existence.

It is the lightest draft binder in the world.

We furnish these machines in three widths of cut, 5, 6 and 7 feet.

MAIN GEARING.

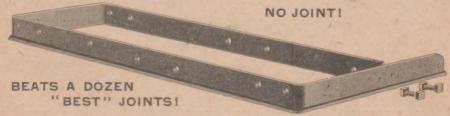


MAIN GEARING.

The cut on this page shows our Main Drive Wheel, Main Frame and Main Gearing, power being transmitted through a short linked malleable chain, which reduces friction and wear to a minimum, besides transmitting the maximum of power. The chain tightener is always in place to prevent any slipping, should chain, in time, become slack.

HARVESTER FRAME.

The ideal construction of the frame-work of a harvester and binder would be that made in one piece without a single joint, bolt, rivet or fastening. With such a construction the farmer could rest easy, with no thought of his machine racking to pieces by joints becoming loose through loss of nuts, bolts or rivets.



The frame of the NEW EMPIRE approaches this ideal nearer than that of any of its competitors, being the only harvesting machine with its main frame in one piece, having but one joint fastened by two bolts.

The frames of other harvesters have twelve or more joints and twenty or more pieces. Our frame is made of solid flanged steel with a transverse surface of three and one-half inches $(3\frac{1}{2})$, to which is solidly connected the necessary parts; which is not possible with machines using in their frames gas pipe or rectangular shapes with small surfaces.

Remember that a harvesting machine in operation on rough stony land, with dead furrows and ditches, subjects every joint to severe strain, and the greater the number of joints, the greater the liability of their becoming loose and frame twisted, thereby throwing bearings out of line, causing machine to run hard and soon wear out.

Our frame never has and never can twist out of place or shape; its strength and mechanical construction is such that it will outwear any other part of the machine.

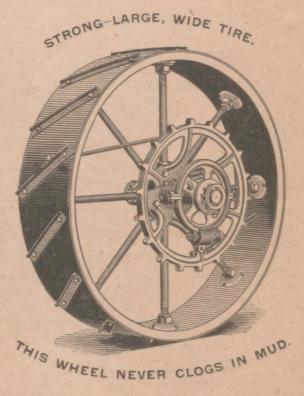
Thirty thousand EMPIRE Binders with this frame are now in use, and we have yet to hear the first complaint from anyone. Its simplicity, combined with its great strength, makes it superior in every way to any other harvester frame yet made.

THE NEW EMPIRE DRIVE WHEEL.

Nine-tenths of the weight of a harvester and binder is carried on its drive wheel, and this must be done, in many cases, over ground rough and stony, or that containing dead furrows and ditches.

The EMPIRE Drive Wheel is recognized everywhere as the best that has ever been produced. We were the first to depart from the old style wooden spoke wheels, and thirteen years ago produced the first combination steel and iron wheel that had ever been used; the wheel that we are now building being substantially the same in principle as the one first made.

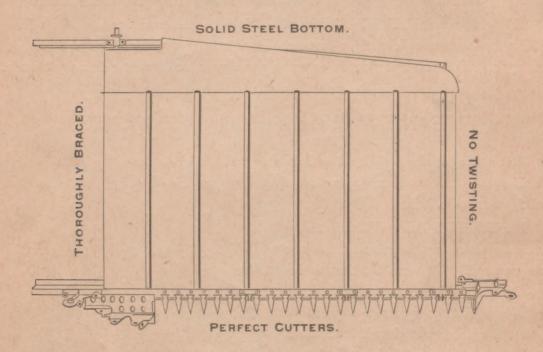
The cut herein shows the master wheel complete, with main shaft, driving sprocket, raising and lowering gear and segment pinions. It is over 38 inches in diameter over all, 8½ inches wide over tire; has felloes 1½ inch thick; has but eight steel spokes, with feet or flanges on each spoke, so arranged that they can readily be tightened with a common wrench, thereby avoiding the necessity of resetting tire should it ever, from any cause, become loose.



Contrast the construction of this wheel with those of our competitors, which are low, with narrow, thin tires, with a multiplicity of small spokes (some as many as thirty), and you can readily understand why EMPIRE Binders can operate over soft, boggy ground, while other machines mire down and are swamped.

This wheel is the best in principle, strongest, most durable and most practical of any that has ever been produced for the purpose, and not a single one, to our knowledge, has ever failed.

HARVESTER PLATFORM.



The platform on the NEW EMPIRE is a model of strength, rigidity, durability and lightness of weight. It is a departure from all other forms of construction heretofore used; in that the rear sill, instead of being parallel to the cutter bar, is angular thereto, thereby acting as a brace to the outer end of the cutter bar, preventing any rearward sagging of the platform.

The cutter bar and rear sill are made of cold rolled steel, Z-shaped, solidly connected and braced by three steel angles, to which is riveted a solid steel bottom.

With the exception of the roller and the guides, no wood is used in the construction of our model platform; no swelling, kinking, rotting or breaking with our platform bottom.

The cutter bar is so made that the grain carrier runs close to the sickle. The guards are malleable iron, securely bolted (not riveted) to the bar, and each one has a shear-edge steel guard plate, tempered and hardened the same as a knife section, which gives it an excellent cutting surface. These plates can be easily ground or sharpened by simply removing the bolts from the guards.

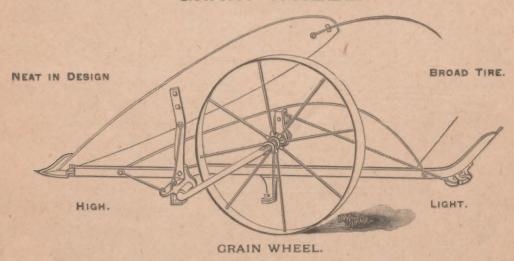
The distance from platform bottom to the top of guard plate is but two inches, so that in tangled grain the NEW EMPIRE Platform can cut close to the ground and save the grain, where platforms with wooden bottoms fail.

THE ELEVATORS.

The NEW EMPIRE Elevator has steel angles, to which are riveted steel sides. It extends several inches in front of the line of the platform and by its peculiar construction is enabled to handle any grain delivered to it, without clogging or choking; a difficulty experienced by all of its competitors.

To prevent the trouble caused by the severe strain and racking that all harvesters are subjected to in passing over dead furrows and rough and uneven ground, the elevator sides of the EMPIRE are so adjusted that they will always remain square, so that the canvas will run evenly and smoothly over the rollers. The adjustment can be made quickly and the device is one of the utmost importance in keeping the elevator sides in proper position, so that no trouble may be caused by the moving of the rollers and canvas.

GRAIN WHEEL.



The construction of our Grain Wheel is ideal. With a broad steel tire, elliptical spokes, malleable hub, no joints or fastenings, bolts or rivets, but made as though in one piece, light in weight, large diameter, it has no equal for the purpose for which it is intended. It has a removable bushing, so that the wheel cannot wear out during the life of the machine. Its application to the end of the platform is simplicity itself.

The cut herein shows its construction and manner in which the raising and lowering device is applied, making it unequalled in point of simplicity and ease of operation, being wholly under control of operator from his seat, as shown elsewhere in this pamphlet.

THE REEL.

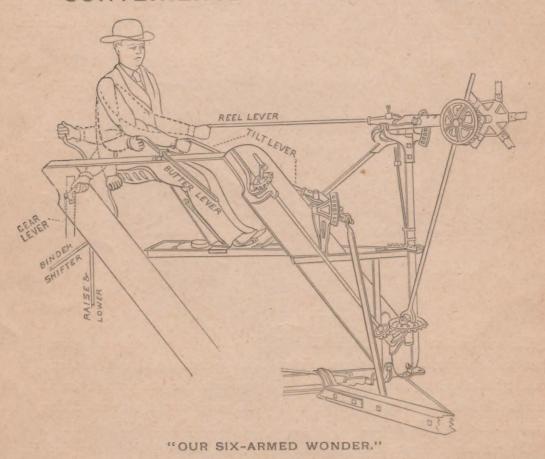
Our Reel is supported by a rigid post, mounted on the inside platform shoe and not high on the elevator, as is the case with machines of our competitors, whose reels, on account of short bearings, are constantly racking, and being mounted on the elevator have a tendency to get out of true, where machines are in operation on rough ground.

Our Reel is so constructed that it can quickly and easily be adjusted to all conditions of grain, and is the simplest, strongest and most perfect working Single Lever Reel ever put on any machine.

One hand of the driver is required to control his team; with the other he can instantly place his reel in the position desired, which is not possible with reels having two levers.

It can be operated by a boy, up and down, forward and backward, making it possible to harvest uneven and lodged grain, binding it in a most satisfactory manner.

CONVENIENCE OF ADJUSTMENT.

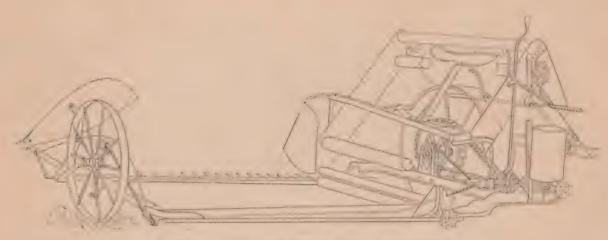


The cut of the "six-armed wonder" shown here is not a "freak of nature," but designed only to show with what ease the driver can, from his position in the seat, place his right hand on six different levers without shifting his position.

The NEW EMPIRE stands unrivalled for convenience, ease of handling, and quick adjustments of the various levers in reach of the driver.

By a most ingenious invention, not a trigger is touched with finger or foot to accomplish all this, but by simply grasping a handle the levers can be instantly thrown in any position desired, so that a boy can handle them substantially as well as a man.

RAISING AND LOWERING ARRANGEMENTS.



RAISING AND LOWERING ARRANGEMENTS.

There is no device for raising and lowering a binder, so simple, convenient and perfect as that used on the NEW EMPIRE. The driver, from his seat, while machine is in motion, can by a few turns of the crank, shown in the cut, quickly raise or lower the entire machine, both ends simultaneously, high enough to clear any ordinary obstruction or low enough to cut close to the ground.

It is not an uncommon thing for purchasers of the EMPIRE to cut around the field, raising or lowering machine as desired, while operators of other machines are compelled to stop and adjust each end separately. Where grain is of uneven growth (short and long in same field), such construction causes vexatious delay, which is entirely avoided by the excellent appliance on the NEW EMPIRE.

BINDER TABLE SHIFTER.

In fields where the grain in many places is tall, while in others short, the advantage of a device for quickly raising or lowering machine to meet existing conditions is apparent. Equally so is a device for moving the binder table while the machine is in motion, so that the bundles can be bound anywhere the operator may desire.

The entire binder table can be moved forward and backward by a few turns of the crank, and the bundles bound at any required point.

This is accomplished without the use of any triggers or latches, and the table is locked in position the instant the hand leaves the crank.

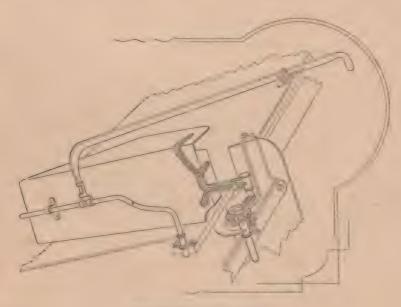
Our table shifter is a departure from old methods, and is one of the many features of superiority that has placed the NEW EMPIRE in advance of all others.

TILTING DEVICE.

Our tilting device for taking up lodged grain, or for adjusting cutter bar to a higher or lower position, is very simple, and is controlled by the driver, from his seat, by a single triggerless lever.

He can raise and lower the points of the guards at will, quickly and easily, as the machine, with the weight of an ordinary man, is in perfect balance.

BUTTER ADJUSTER.



BUTTER ADJUSTER.

Besides shifting the binder for grain of unequal length, the Butter of the NEW EMPIRE can quickly be brought into assistance; a very valuable aid in handling short grain.

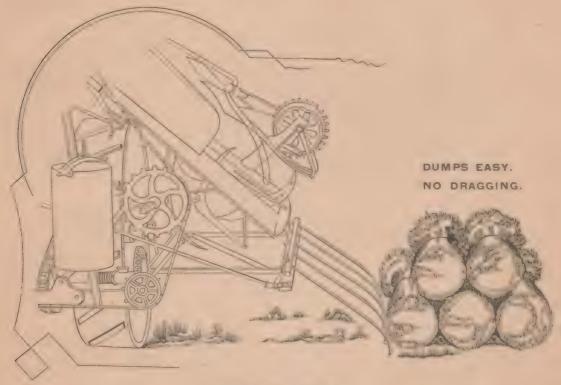
In addition to the adjustment of the reel, as described in another page, the driver can, from his seat, instantly throw machine into or out of gear.

PITMAN CONNECTION.

No farmer should purchase a binder using a short pitman or one with a rapid stroke. The pitman on the EMPIRE is solid steel, long, with its stroke almost on a level with the sickle; each stroke carrying the section through two guards.

Our pitman will outwear ten such as some of our competitors are using.

BUNDLE CARRIER.



BUNDLE CARRIER.

One of the best features of our machine is the Bundle Carrier, which, for ease of operation and general utility, stands without a successful rival.

Our Carrier is supported upon the main frame and not upon the binder attachment; consequently the operator need not shift any load in adjusting binder for long or short grain; an arduous undertaking when Carrier is attached to the binder head.

With our Carrier we use a balanced steel finger; the inner portion being forward of the axis upon which it turns, while the outer portion is rearward of same, the finger being perfectly balanced.

By this construction, the Carrier becomes a self-dump as the load accumulates, the discharge being quickly and easily made as the inner end of the finger rises while the outer end falls, making the incline of the teeth greater than on any carrier in use.

REPAIRS

Owing to the great care taken, and quality of material used in manufacturing the EMPIRE Harvesting Machines, few repairs are needed. However, for convenience, we carry a large stock of repairs at each of our branch houses and distributing depots; also a liberal supply with each of our local agents, so that no delay or inconvenience, in procuring necessary parts, need be caused to any purchaser of the EMPIRE.



OILING THE BINDER.

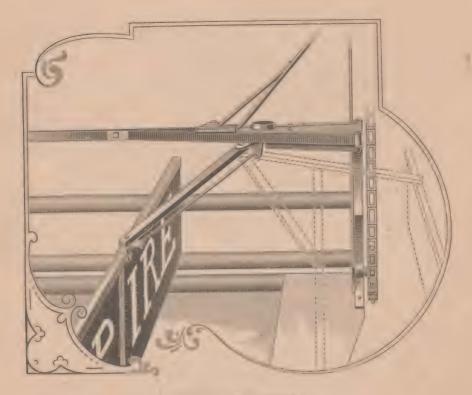
All the bundles dump off in one pile; more than that, it rides over any obstruction with which it may come in contact and folds completely out of the way if the binder requires operator's attention for oiling, etc.

WE SELL ALL OUR MACHINES UNDER THE FOLLOWING

GUARANTEE:

A LL EMPIRE Machines are marranted to be well made, of good material, and, if properly managed, to do good work. The purchaser shall have one day in the harvest field to give the machine a fair trial, and agrees to see that it is properly managed. In case the machine does not do good work, the purchaser is to give written notice, both to the agent from whom he receives the machine and to THE J. F. SEIBERLING & CO., Akron, Ohio, stating wherein it fails, and shall allow reasonable time to get to it and remedy the defects, if any, and the purchaser shall render necessary and friendly assistance to the person sent to look after the machine, and shall furnish suitable team for making further test of the machine, and if it cannot be made to do good work, he shall, at option of the agent of THE J. F. SEIBERLING & CO., return it to the place where he received it, free of charge, in as good condition as when received, except natural wear, and a new machine will be given in place, or the money or notes given will be refunded. Continued possession of the machine, or failure to give notice as above stated, shall be conclusive evidence that the machine fills the warranty.

THE EMPIRE FLAG.



THE EMPIRE FLAG.

The NEW EMPIRE is recognized as the handiest, most convenient harvesting machine ever placed in the hands of a farmer, and the EMPIRE Flag assists materially in making up the sum of conveniences which place our machine in advance of all competitors.

It is the only machine where the driver can use his left hand continually to control the team, leaving his right hand and left foot free to make all the adjustments necessary to handle various kinds of grain while the machine is in motion.

Our flag is supported from seat frame, and is held in position by the friction of its weight. With the left foot upon the supporting arm, the driver can readily move the flag forward or backward, as may be necessary for handling short or long grain; simultaneously, the reel can be brought into proper position with the right hand, and almost instantly the butter and binder table can be brought into proper adjustment. When necessary to oil the canvas rollers or adjust the canvas straps, the flag can be swung to the rear, giving free access to the platform.

Our machine is designed, not only to do its work perfectly, but with the greatest convenience and comfort possible to the driver. Our large pressed steel seat is the most comfortable that could be used, and can never break.



This farmer purchased a NEW EMPIRE with a transport. It enabled him to mount his machine, single handed, in five minutes, and reach his barn ahead of the storm. That was because it could be quickly applied, and was strong enough to stand the hard drive over rough ground.

FLAX AND CLOVER DUMP ATTACHMENT.

This attachment is used in carrying the grain in unbound bunches, and is largely used where flax is grown; but is furnished only on special order.

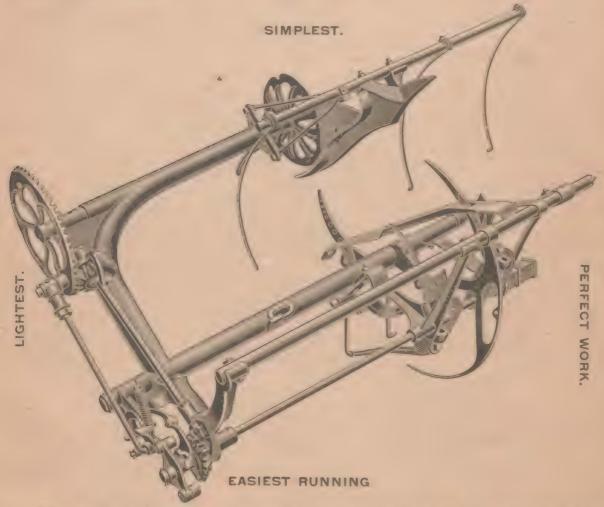
We are the only manufacturers who set up and operate in the factory each and every Binder after it is finished, thoroughly inspecting it, and giving each knotter a careful test in binding grain. In this way we know that there will be no difficulty in setting up the machine in the field, and are certain it will do good work from the start.

THE NEW EMPIRE BINDER WITH SIMPLIFIED KNOTTER.

A Masterpiece in Mechanics.

The Crowning Triumph of a Long Inventive Career.

While our competitors were struggling along with their clumsy, complicated knotters, some containing as high as 43 pieces, with a plunger bolt and multiplicity of springs, our Mr. J. F. Seiberling brought out the simplified knotter which has been in use on our machines for the past seven years. This knotter revolutionized the thought in knot-tying devices, and though our competitors have endeavored to make their knotters approach in excellence that in use on the EMPIRE, their efforts have been a signal failure, as it stands to-day, peer above all.



Having discarded more than two-thirds of the mechanical parts used in the knotters of our competitors, our thought turned in the direction of simplifying, making better and more effective the mechanism necessary to bring the grain into the binder, trip it and eject the bundle.

LIGHT, NEAT, STRONG,

PRE-EMINENTLY THE HIGHES



ABSOLUTELY the Only TWO-HORSE Binder in the Field.

The "NEW

Durable, Symmetrical.

ST DEVELOPMENT OF THE ART.



EMPIRE" 5, 6 or 7 Feet Cut.

Our efforts have been rewarded with complete success, and last year we put into the harvest field the lightest, simplest and most effective operating binder-head ever constructed by the hand of man. It is a marvel in itself, a masterpiece in mechanics, and will require a personal inspection on your part to appreciate the great stride taken in advance of all competition.

We have discarded the well known Appleby trip hook, trip shaft, with its connections; also the compressor shaft, compressor bar, quadrant, bracket, cam, with their connecting parts; reducing thereby the mechanism of the binder fully one-half.

Our Binder weighs 158 pounds, making it not only the lightest binder-head ever used, but 150 pounds lighter than the ordinary type of Appleby machines, still in use by most of our competitors.

We have discarded the chain of intermediate gears and the clumsy chain and sprocket gearing found on other machines, substituting therefor bevelled gearing, neat in design and effective in its operation.

Contrast the simplicity of our construction with that of other machines having twice the number of shafts and journals under the deck, and you can readily understand how we have been able to so largely reduce the weight.

Our tripping device is a model of simplicity, directness of operation, and is a complete departure from all old forms. After seeing our appliance, the wonder is, that the clumsy trip and trip-shaft of our competitors, with all the troubles attending them, could have continued so long in use.

We discard, wholly, the use of the trip-hook for tripping the binder, and substitute in its place a long deck trip, hinged high on the deck. As a result of our construction, the instant that the grain leaves the packers, pressure is exerted upon the deck trip until a sufficient amount of grain accumulates to make a bundle, when the clutch slips and needle moves.

Users of binders well understand the difficulties encountered in binding damp, fluffy or tan-led grain, which packs tightly between breast-plate and deck, without exerting sufficient pressure against trip-hook to trip the binder. As a result, the binder chokes, and on soft ground mires down; an experience not only extremely annoying, but causing great loss of time. This result is impossible with our new deck trip, as grain packing under the breast-plate exerts pressure downward on the trip so that clutch is slipped before a sufficient amount of grain can accumulate to choke the binder. The NEW EMPIRE is the only Binder that has this invaluable device.

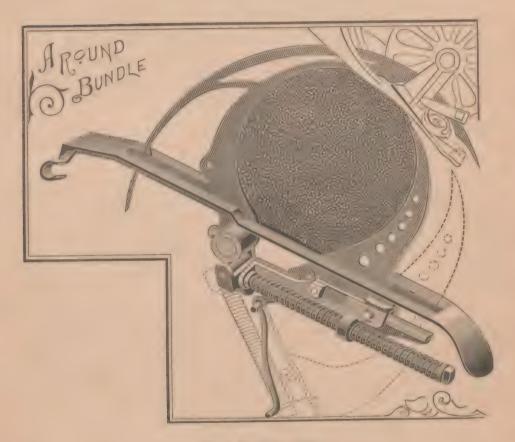
Our trip can be adjusted to make any required size of bundle, and through an ingenious device, repeating is absolutely prevented; a very annoying experience with all old forms of machines.

Having no compressor shaft, and consequently no quadrant or cam in drive wheel, our machine, instead of requiring the strength of a man to turn it when empty, can be

revolved with the strength of a finger; one of the features that contributes toward making a great saving in power, and making the NEW EMPIRE absolutely the lightest draft Harvester and Binder in existence.

THE DECK TRIP.

DESIGNED ON CORRECT PRINCIPLE.

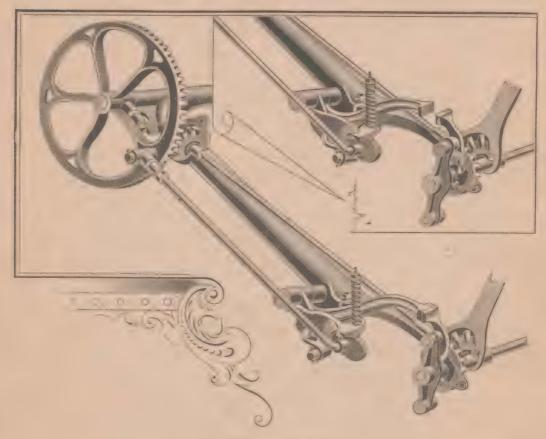


THE DECK TRIP.

Another distinctive feature in our new trip, found only on the EMPIRE, is its yielding compressor book, which, under pressure, yields equally at all points, not tipping back at the top, as is the case with machines of all competitors; in consequence of which the NEW EMPIRE is the only machine that can bind, under all conditions, a round bundle; doing this work with much less power than is possible with compressor of the old style.

THE TRIP LOCK.





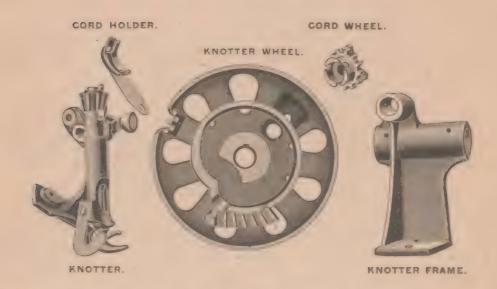
THE TRIP LOCK.

The trip lock on the EMPIRE is the best known device to prevent the binder repeating or making small bundles; a difficulty encountered more or less by all binders. By our ingenious device this trauble is entirely removed. When machine is working in heavy grain, choking can be prevented by so adjusting the binder that it will trip with a slight pressure, and yet avoid repeating. The arrangement is very simple, but certain and effective.

STEEL DECK.

One of the excellent features of our new Binder is the arrangement of the steel deck by which the journals of the packers, packer shaft and needle shaft can be conveniently reached for oiling, without crawling under machine or removing the deck; this arrangement serves also as a convenience in threading the needle. Our deck is steep, and as a result gravitation materially assists in discharging the bundle in tangled grain.

OUR PEERLESS KNOTTER.



Our peerless knotter, in its complete form, has but five parts, thirteen pieces, two springs, no plunger bolt, not a single coil spring, no tucker, knot stripper, no separate knife arm or swinging cord-holder frame to yield up cord; having no knife arm, stripper or tucker working under knotter, enables us to reduce the distance between the knotter and bundle fully one-half, as compared with the Appleby knotter, making thereby a saving in twine, besides tying the bundle tighter.

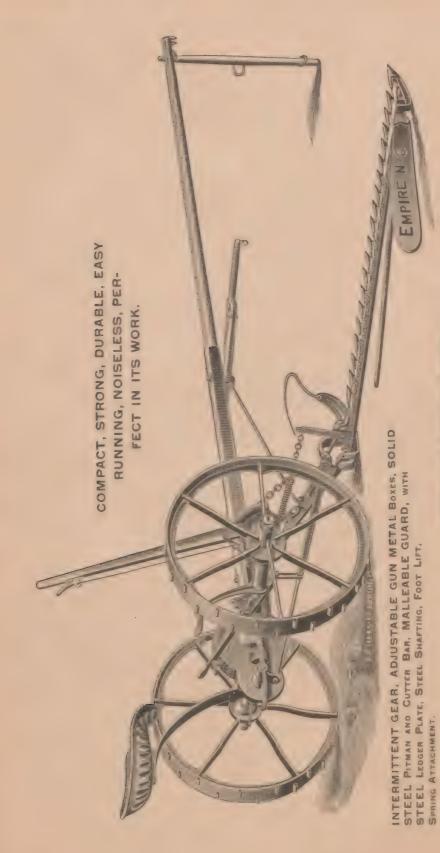
In addition to this saving of twine, from one and one-half to four inches of twine is saved by our knotter in forming the knot, over ALL other Binders; so that the NEW EMPIRE will save its cost in the use of twine that our competitors waste.

Agents of competing machines may talk of their twine saving knotters, but remember, we broadly guarantee to harvest your crop, using LESS twine than any machine in existence.

This great economy is the result of our patented cord holder, which is so arranged that it feeds toward the knotter while making its revolution, the twine that our competitors cut off and waste being utilized in forming the knot.

All the parts composing our knotter are steel and malleable iron all are in plain sight, and hence, accessible when necessary for oiling or adjustment.

Our cord holder is adapted to use any kind of twine and will work equally well, be the twine heavy or light. For simplicity, certainty of operation and economical use of twine, our knotter stands to-day unequalled.



IMPROVED EMPIRE MOWER.

IMPROVED EMPIRE MOWER.



The Empire Mower is made of the best material by the best skill that money can command. It is built for ENDURANCE. Will stand hard, rough usage, and, whether cutting tough alfalfa or wire grass, over ground containing bogs, stumps, or stones, meets all the requirements and performs its work satisfactorily.



For the coming season, all of our Mowers will be manufactured with the Foot Lift and Spring Attachment, detailed elsewhere.

We will continue to manufacture our No. 5 Improved Mower, 4½-foot cut, which has met with popular approval wherever used, but shall manufacture more extensively than ever our No. 6 heavy truck, 5-foot cut, and "Big Six," 5¾-foot cut, with valuable improvements that make them unexcelled in the line of grass cutting machinery.

All of our Mowers are powerful cutters, and for durability, perfection of workmanship, ease of management, lightness of draft, and beauty of design, are not equalled in this country.

Steel and malleable iron are largely used in their construction, thus insuring extraordinary strength and durability. They have wide axles, high wheels, large and simple gearing, perfect draft-rod, straddle the swath and do not track on cut grass. Their work is close and clean, and team does not walk in the standing grass.

As a result of a wide tread, high wheels, simple and effective gearing, and direct draft-rod connection, in connection with our spring attachment, their draft is lighter, for same width of cut, than any Mower in the market.

Our machine has but two gear wheels and two pinions, and is the only practical enclosed gear mower now built.

NO LOST MOTION,

ONLY TWO GEAR WHEELS
AND TWO PINIONS.

The Gearing is enclosed in a small case completely protected from dust or dirt. The sketch gives a birdseye view of it. By a glance at the illustration, it will be seen that the EMPIRE gearing has a spur-wheel and pinion, containing two sets of teeth, alternately and intermittingly arranged. By this principle we overcome lost motion, noise, draft and wear. By it we gain durability and simplicity not attained by any other style of cog gearing. This gearing is warranted to outwear that of any other mower on the market. The gear frame is east in one piece, and is short and compact, thus ensuring great strength, and in no case will it warp or bend and throw the shafts out of line.

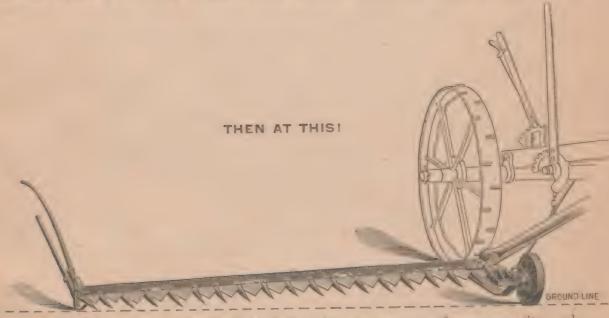
THE GEARING.

The Coupling Bar used on the EMPIRE is made of malleable, instead of wrought or cast iron, as used on other mowers. From this bar the machine is drawn instead of from the tongue, which makes the draft direct, and relieves the weight of the shoe and cutter bar upon the ground.

Tilting and Lifting Levers. The lifting lever raises and lowers the cutter-bar bodily, and the tilting lever will raise the points of guards to pass over stones, roots and bogs, and it will lower them sufficiently to cut close to the ground, for lodged grass.



Tilting Arrangement. Look at this picture and you will see that our Cutter Bar has no wheels to make machine do uneven cutting on rough or boggy ground, but instead, wide steel soles on both inside and outside shoes which will carry bar evenly over rough ground, and are adjustable so that bar can be set to cut low or high, and, in either case, will tilt perfectly, the points of all the guards being same distance from the ground, whether tilting up for rough, boggy or stony ground or down for lodged and tangled grass.



And then on this picture, showing tilting arrangement of our competitors who use a lead wheel on inside shoe, which on rough ground runs very hard and makes uneven and ragged work, besides making it impossible to tilt the guards down for lodged and tangled grass.

A glance at the two illustrations will at once show the superiority of the EMPIRE tilting arrangement over any other mower.

CUTTER BAR.

One of the most commendable features of the EMPIRE Mower is its Cutter Bar. This is Cold Rolled Steel, and is warranted the stiffest, strongest and most durable bar made. It has a hard, smooth surface, especially adapted to the wear of the knife. We furnish no iron bars.

Our Cutter Bar sets from four to eight inches further back toward the center of power than is the case on any other front cut mower, which not only balances the machine better, but brings the horses much nearer the power, thus throwing the weight of the cutter bar on the wheels instead of on the horses' necks.

The Pitman Rod is made of the best quality round steel. The pitman box is made of gun metal, and so arranged that all lost motion can be taken up at any time by



simply turning the set-screw (see sketch), thus giving a full and steady stroke to the knife and entirely avoiding any jerking, which is liable to break the knife head.

The Guards are made of malleable iron, and have a shear-edged steel guard plate. When the cutting edge of this plate becomes dull, the guard can very quickly be taken



EMPIRE MOWER GUARDS WITH SECTION OF FINGER BAR AND STEEL SHEAR-EDGED GUARD PLATE.

from the bar by the removal of a single bolt, when the plate can be ground on a common grindstone.

OUR IMPROVED ADJUSTABLE CRANK SHAFT.

Our Improved Front Crank Shaft is the most practical, durable and economical Crank Shaft Box now in use, being so constructed as to adjust the wear of journal. If the farmer gives this attention, the box will last for many years. It can be quickly and easily removed and a new one replaced at a very small expense.

. . . .

The Rear Crank Shaft and Pitman Boxes are of best gun metal. We use cold rolled steel shafting, which has a hard, smooth surface. The crank shaft journals of some of our competitors have no means of adjustment. A hole is bored in the cast iron frame into which an iron shafting is placed. For a season or two this journal will not cause serious trouble, but there being no mode of adjustment, there will soon be so much play that the machine cannot cut without choking. The machine must then be taken to some blacksmith shop and box babbitted, all of which is very expensive and unsatisfactory. The EMPIRE will outlast ten machines constructed in this way.

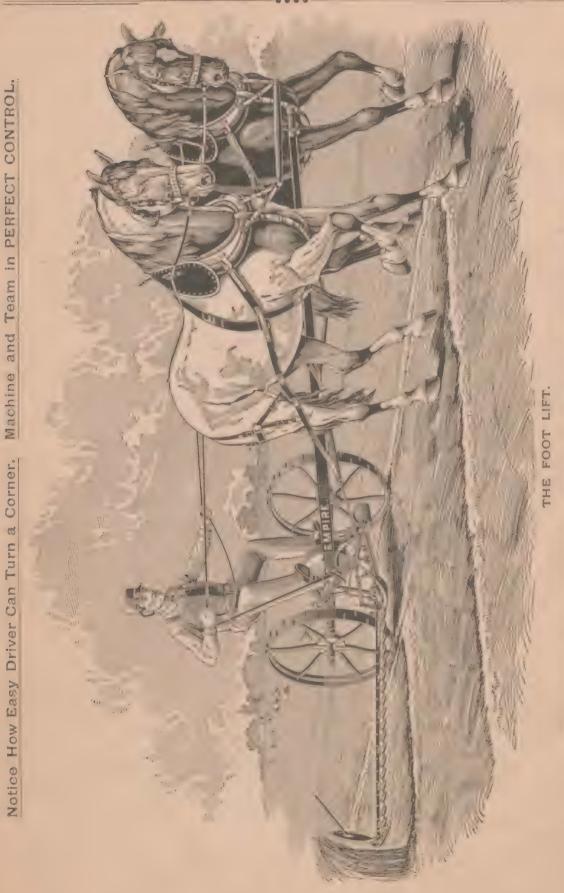
FOOT LIFT.

This means an appliance to lift the cutter bar with the foot, instead of using the hand lever, which enables the driver to use both hands to guide his team. A very valuable arrangement in turning corners or where a boy is operating our machine; and with our foot lift a ten-year-old boy can operate our Mower substantially as well as a man, simply because it works so easy that he is able to handle the bar with the foot lift when he could not do so with hand lever; you need not get off the seat or stand bolt upright to use our foot lift, but simply put your foot on the treadle and with a little pressure the spring will do the rest.

All our machines will be made with the spring balance floating finger bar. By this device the weight of the finger bar at either or both ends can be so adjusted that the shoes will rest but lightly on the ground, which operates not only to obviate the friction, resulting from shoes sliding on the ground, but transfers the weight of the cutting apparatus onto the drive wheels and thus increases their traction and consequently the cutting power of the machine. By reason of the removal of the dead weight from the ground, the finger bar can be more easily raised and tilted, and will float over uneven surfaces, adjusting itself to rough and uneven ground better than any mower without the spring attachment.

This improvement cuts off all the side draft, even with the widest cut. One man and team will do nearly as much cutting in a day with the Big Six as can be done by two men and two teams with ordinary mowers.

The spring device also operates to keep finger bar level or on a slightly upward curve instead of allowing it to sag in the middle, as is the case with other wide cut mowers. This, to a great extent, obviates the trouble of the middle portion of cutter bar riding on uneven ground and the middle guards coming in contact with obstructions.

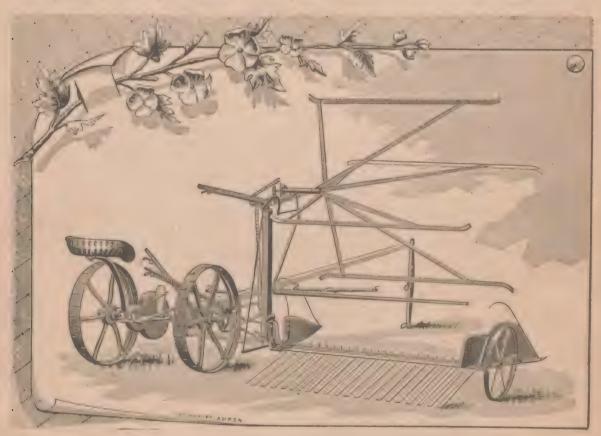


FLOATING BAR.-Weight of inner and outer end carried on Main Axle.

No. 3 STANDARD

SENIOR MOWER AND DROPPER COMBINED.

We shall continue the manufacture of our No. 3 Empire Standard Senior Mower, the same as made by us for the past eighteen years. This mower can be combined for reaping with our dropper, table-rake and sweep-rake attachments, for which purpose it has no equal. These reaping attachments consist of a separate cutter bar with either the dropper or Empire side delivery table-rake or sweep-rake, either of which can be easily attached



SENIOR MOWER AND DROPPER COMBINED.

at any time. For light running, both in reaping and mowing, and the simple and easy manner by which the various reaping attachments can be adjusted, this mower stands to-day without a rival. Any farmer having considerable grass and but little grain to cut, or for cutting where a self-binder cannot be used, no machine will give better satisfaction than the above, known as our No. 7 Combined Dropper.

No. 10 EMPIRE SINGLE WHEEL REAPER.

This machine is very light and can be used in harvesting crops on hilly ground where a light draft is an important consideration, and it is well adapted to cut any kind of grain.

The gearing is simple and effective. Reaps $5\frac{1}{2}$ feet.



Binder Twine. The best binder in existence cannot do good work using an inferior quality of twine. The time lost by breaking of twine, stopping, rethreading and tying by hand the missed bundles will more than pay for a season's supply of good twine. The "best is the cheapest." Poor twine is dear at any price. As manufacturers of binders, and twine, we are doubly interested in furnishing an article that shall work well. Our twine runs more feet

to the pound, smoother, more uniform, has less thick and thin spots and is consequently stronger, than any twine on the market, and it will give entire satisfaction.

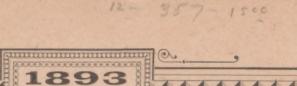
A WORD = = = TO THE WISE.

6666

N the foregoing pages we have presented illustrations and descriptions of the leading features of the EMPIRE line of Harvesting Machinery, and hope that our efforts to make plain our claims of superiority have been successful.

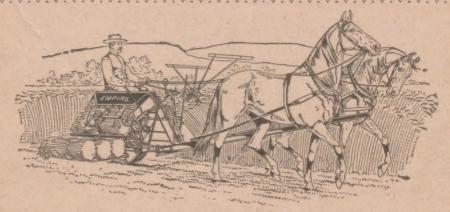
BEARING CONSTANTLY IN MIND

- That—Every EMPIRE machine is set up and thoroughly tested before leaving our factory.
- That—Every machine is fully warranted to be and to do all we claim for it.
- That—The EMPIRE KNOTTER absolutely wastes no twine whatever, saving one band in every ten, making it the most economical binder manufactured.
- That—They are all made of the best material, and will cut more grain or grass, do it easier, with greater convenience to the operator, with less expense for repairs, less delay than any other harvesting machinery on earth.
- That—A careful inspection of our machines will confirm the facts herein contained, and we invite the most critical examination.
- That—All letters of inquiry regarding agencies or other matters will receive prompt attention.



	GIRI		HUMO		H7000		Ulania									ARTONA	alogy	min		HIAIBIII		
Zanuary.							1	February.							March.							
	-	-	-	_	_	-	8	Mo	Tu	-	-	-		Su	Mo	Tu	We	-		Sa		
1 8	2		-		-				7	8			4			7	1 8	2		4		
15	-	-	11 18				P31		1					12	1 -				10	18		
22						28	19	20	21	22	23	24	25	19	20	21	22	23	24	25		K
29	30	31	****	****	****		126	27	28					26	27	28	29	30	31			
						****				****	****	***	***		****		****		* * * *			
		A	pri	il.						Day	Q.					3	un	e.				
Su	Mo	Tu	We	Th	Fr	Sa	Su	-		-	-			Su	Mo	Tu	We	Th	Fr	Sa		
						1		1	2	3		5						1	2	3		
2	3	4	5	6	7	8	0						13	11	-			8	9	10		
16	17	18												18					23	24		
23														25								
30							B			***											m	

.....



EMPIRE STEEL	FRAME	HARVESTER	AND BINDER
--------------	-------	-----------	------------

THE REAL PROPERTY OF THE PROPE			30			
)	1					
CITICITY						
CLITTE	8					
CLICAL	·		CMPIRE			
TOTAL	5					
TITITI						
IXXXXI	5		The same of the sa			
TIXIX			Europe C	TEEL FRAME HARVESTER AN	The second second	
1	0	٧	EMPIHE S	STEEL FRAME HARVESTER AF	A A A A A A A A A A A A A A A A A A A	
E Co		111	July.	Hugust.	September.	
000			Su Mo Tu We Th Fr Sa	Su Mo Tu We Th Fr Sa	Su Mo Tu We Th Fr Sa	
**			2 3 4 5 6 7 8	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	3 4 5 6 7 8 9	
			9101112131415 16171819202122	513141516171819 2520212223242526	10111213141516 17181920212223	
			23 24 25 26 27 28 29 30 31	1 28 29 30 31	24 25 26 27 28 29 30	
			October.	Rovember.	December.	
			Su Mo Tu We Th Fr Sa	P .	Su Mo Tu We Th Fr Sa	
			1 2 3 4 5 6 7 8 9 10 11 12 13 14	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	3 4 5 6 7 8 9	
			15 16 17 18 19 20 21	12 13 14 15 16 17 18	10111213141516	
			29 30 31	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	24 25 26 27 28 29 30	
					B31	
		4		KKKKKKKK	KKKKKKKK -	

